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AUTHOR	Markless, Sharon
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ABSTRACT

This paper draws on the experiences of the author during the past 15 years of working primarily with school, college, university and health librarians, but with occasional forays into the public and special library domains. It is written by an educationalist and teacher trainer with an interest in library development; someone who has never run a library, but who has researched into them and has supported library-based action research; someone who is not a librarian, but who has designed and facilitated innumerable in-service courses for librarians. The paper argues that teaching in libraries is too often mired in a traditional view of teaching as information giving; that sessions run by librarians often actively flout many of the principles that underpin effective adult learning (usually with the best of intentions and informed by the need to cram a lot into a short space of time); that teaching courses for librarians usually focus on practical teaching techniques to the detriment of an understanding of learning theory. This paper asks what is fundamental to the enhancement of librarians as teachers. It argues that anyone who teaches needs to begin with insights into learning, that learning theory is not an optional extra. The paper then explores some of the relevant theories that can be used to support good teaching in libraries because "there is nothing so practical as good theory." Finally, the paper looks at some different models of librarian in-service support used by the author in different contexts. (Contains 18 references.) (Author)

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Learning about learning rather than about teaching

Sharon Markless
Independent Consultant and Senior Associate, Information Management Associates - formerly a University Senior Lecturer in Professional Development, Twickenham, UK

Abstract:

This paper draws on the experiences of the author during the past fifteen years of working primarily with school, college, university and health librarians, but with occasional forays into the public and special library domains. It is written by an educationalist and teacher trainer with an interest in library development; someone who has never run a library but who has researched into them and has supported library-based action research; someone who is not a librarian but who has designed and facilitated innumerable in-service courses for librarians.

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"It makes no sense to decide how one is going to teach before one has made some study of how people learn." (Sotto 1994)

"...teaching is <u>not</u> just a practical skill which requires no thought and no education, only training." (Hammersley 1991)

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Learning theory in teaching

For the last fifteen years I have been working with professionals to enhance their teaching. This has entailed observing and giving feedback on hundreds of lessons taking place in classrooms, libraries, police stations, army ranges and operating theatres. (The professionals on my courses include police officers, nurses, hospital consultants and university lecturers as well as education, health and public librarians.)

One common feature has emerged from these different contexts: the tendency of knowledgeable professions to focus on the information/skills that they wish to impart and to structure their teaching according to the logic of the content. Sessions are very rarely planned with regard to principles of learning. The professionals I have worked with are obviously concerned about their students' learning. However their lessons embody 'traditional' ideas about the relationship between teaching and learning (often reflecting how they were taught), characterised by 'teacher' control of pace, content and sequence and a lot of student listening/watching/repeating the steps demonstrated. (It is interesting that one-to-one sessions display these characteristics much less frequently.)

I have discovered that the biggest contribution that I can make to the quality of a teaching session is to talk about learning and the needs of learners so as to make the point that each individual needs to think through his/her role as a teacher in relation to the learner and not just in relation to the knowledge to be passed on. In my experience, once professionals really grasp the complexities of learning and have explored some learning theory, they are able to analyse their own teaching in a different way, using new frameworks and criteria. They can enhance what they do, not by incorporating techniques and tips that might not be appropriate to their contexts, but by taking up ideas about effective support for learning.

An understanding of learning enables and empowers people whose primary job is not teaching. It gives them insights into why things might not be going as planned and a robust framework to inform decisions about how to proceed and what to change. It also shows teaching to be the intellectually challenging activity that Martyn Hammersley alluded to in the quotation at the beginning of this paper. When teaching is perceived in this light it cannot become routine or repetitive. Each session is focused on connecting with a group of learners and on trying to make their learning as effective as possible: a challenging and stimulating task.

It is difficult to persuade librarians (and others) to engage with learning theory. They come expecting to be told how to teach and how to plan lessons, write objectives, deal with difficult students and use certain activities. In his book *The Courage to Teach* Parker Palmer (1998) tells how he is often asked *"Wouldn't it be more practical... to offer tips, tricks and techniques for staying alive in the classroom; things that ordinary teachers can use in everyday life?"* He is puzzled by such questions, believing that *"the most practical thing we can achieve in any kind of work is insight into what is happening..."*

When I ask groups of librarians to tell me about their really good teachers it is obvious that good teaching cannot be reduced to a package of techniques. Some of the teachers they talk about lecture a lot, others say very little; some use a lot of activity, others quietly stretch the imagination; some challenge, others are always supportive. What make these teachers good is not the techniques or the approaches that they use, but their ability to connect with their subject and with their students. Some research undertaken by Eric Sotto (ibid) vividly emphasises the point. Students were asked to nominate their best and worst teachers. All the teachers were then sent the same questionnaire about aspects of teaching (lesson planning, managing groups, classroom organisation etc.). The 'best' and 'worst' teachers sent in similar answers to the questions. They all knew 'how to teach'.

Parker Palmer (ibid) sees this as very good news for all those who have to teach. *"If teaching cannot be reduced to technique... I no longer have to suffer the boredom of sitting through 'how to do it'*

catalogues." He believes that this is liberating for all teachers since they no longer have their individual gifts/strengths/personalities crammed into an ill fitting jacket of prescribed approaches. We can each decide what will work best for us, choosing different plans to create the conditions and structures that enable students to learn. But this is only possible when we develop a real understanding of how learning occurs and a real interest in and curiosity about our students and their learning.

Learning is a huge subject. Even those wanting to be full-time teachers only scratch the surface in their initial training. So where should librarians begin? If I believe that developing librarians' insights into how people learn is fundamental to developing librarians as teachers, what elements of learning theory will do the best job? This is a difficult question as I am not sure that a pre-packaged list of tips about learning is much better than a pre-packaged list of techniques for teaching. However there are some things that have proved genuinely helpful to librarians, enabling them to look at their own teaching in a fresh light, to understand what was happening in their sessions and to move forward with more confidence and enthusiasm – after all, learning about learning and how to support it is fun!

How do you learn?

We all know a lot about learning. We have spent years in learning enough to get to this room today. Much can be achieved by talking to people about how they learn, how they see themselves as learners, what they think their strengths are as learners and the impact of context and content on how they learn. It is interesting how rarely people who teach stop to consider themselves as learners. Focusing on specific positive and negative learning experiences can help professionals to remember the complex nature of learning and to identify what can support and what can inhibit learning. I have found that librarians can easily identify these factors – yet lose sight of them when planning teaching. Often when discussing these issues, library induction raises its head.

From their own learning experience librarians know the crucial importance of relevance, timeliness, real needs and consequences - not to mention active participation, feedback and achievement. The importance of these elements in learning is supported by research into adult learning (see, for example Jarvis:1995 or Tight:1996). Most induction sessions are structured to actively ignore these factors! Enhancing the quality of library induction is not about devising more brief activities or ever slicker performance (using video, Powerpoint, etc.) but about recognising the need to build the learners' needs and priorities into induction. With this focus, induction might look quite different: engaging students in discussion about their expectations of the library or about experiences of using libraries; working to meet the information needs that students have at the time (finance, accommodation or the best clubs are likely to be at the forefront of students' minds in their first academic term!); or involving them in looking at how they currently find things in libraries and whether they can become more effective and efficient. It is possible that students might learn something about using the library from such an approach.

Discussion with librarians about their experience of learning provides an opportunity to consider the nature of learning – a contentious subject. How important are changes in behaviour? Are we trying to promote insight and understanding or the ability to remember where things are and how to use the library catalogue? Beliefs about learning and how it occurs anchor decisions about which teaching strategies to use. I believe that it is vital for anyone who teaches to become conscious of, and reflect on, their beliefs about learning and their learning legacies. Assumptions about what a 'good' teacher does, based on beliefs about education and knowledge, manifest themselves to learners – even if we are not fully aware of them.

Librarians usually claim that when they are teaching they encourage student activity and participation. When we look at what they actually do, the librarians are often surprised to find that they carry around with them images that reinforce the transmission model of learning (a legacy from their own experiences).

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The idea of learning as the individual and social construction of knowledge, (in which learners talk, reflect, explore, are challenged and work on real problems) has not been internalised. However, it could be argued that this concern for inner meaning does not offer the most productive approach to learning. An alternative is the Behaviourists approach which focused on altering behaviour through a sequence of stimulus/response/reinforcement activity. In this view of learning, the teacher sequences what is to be learned into small steps, feeds the content in gradually as the learners demonstrate that they have grasped the previous segment. Whilst I believe in learning as a search for personal meaning, that is not the issue here. Each individual can work out their own understanding of how learning occurs and reflect that understanding through their teaching. What inhibits teacher development is the tendency to plan teaching without understanding the differing views of learning. Over the years, numerous librarians have been surprised when they realise that the vast majority, if not all, of their teaching sessions reflect a behaviourist view of learning. On teaching courses for librarians' we often re-plan sessions using a cognitive or humanist view of learning and the results can be startling.

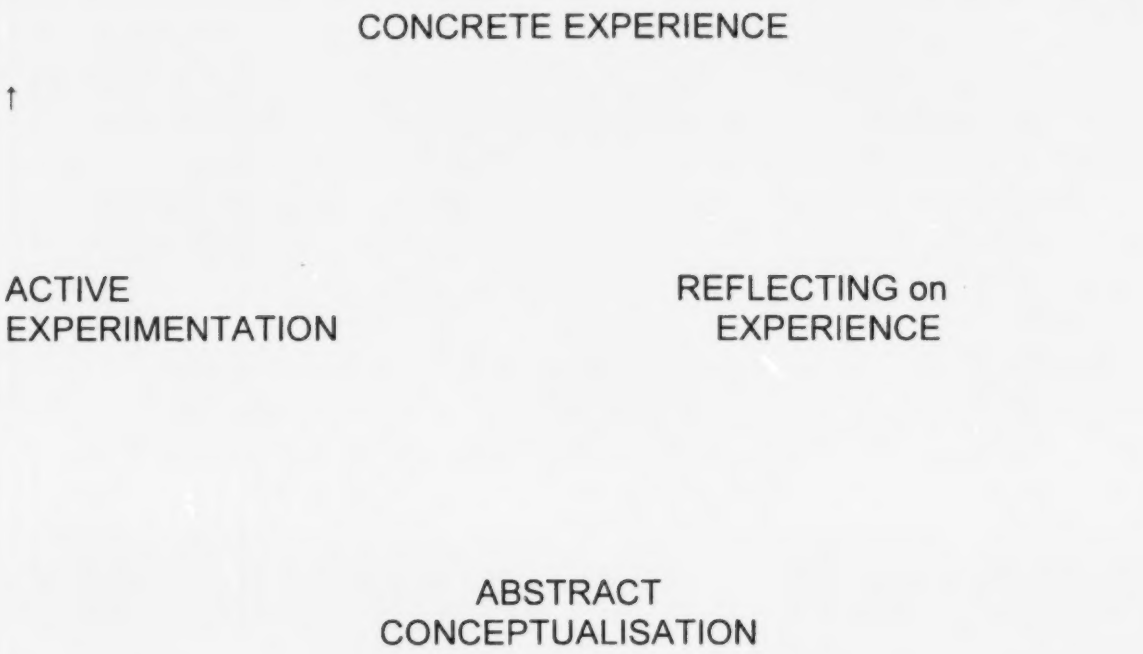
(For accessible discussions about alternative approaches to learning see, for example Entwistle, W and Hounsell: 1975; Curzon: 1990; Jarvis: 1995.)

Scaffolding

Although it may not always appear so, learners have developed search strategies by the time they enter your libraries. During a British Library-funded research project on the effective school library (Streatfield and Markless: 1995) we were observing in a secondary school library and afterwards talked to the librarian about how she worked with the 11 year olds when they first arrived at the school. She said that, because the pupils came from so many different primary schools and her library was much bigger and more complex, she started from scratch with them all. She assumed that they knew nothing and taught them about the layout of the library, classification, using the catalogue etc. We had previously observed in one of the local primary schools and knew it to be excellent in introducing children to books, libraries, reading and research. Because the children were not given a clear opportunity in the secondary school library to show what they could already do, they acted as if they could do very little. This is not an isolated example. Years of observation in school college and university libraries have demonstrated a lack of scaffolding in learning. Over and over again students are told or shown how to use the library and the technology. They are somehow expected to graft a new layer of information onto their existing conceptual framework without seeing how the two relate. Research into learning shows this to be a fundamentally misconceived approach. As Ausubel said, thirty years ago *"The most important single factor influencing learning is what the learner already knows; ascertain this and teach him accordingly"* (Ausubel:1968). Learning occurs most effectively when learners are able to 'scaffold up' from what they already know and can do. This means providing the opportunity very early in a session to enable the learners to tell you, or preferably to show you, the search strategies that they already use. Discussion about how to enhance existing strategies – the bits to change – is much more likely to be internalised when it builds on what learners already know.

Another approach to this concept of scaffolding is found in Kolb's experiential learning cycle. (Kolb: 1984).

Figure 1: The experiential learning cycle



Kolb (1984)

Although this model of learning should not be taken as a blueprint for all planning or as a rigid step-by-step view of how all learning occurs, it does make it clear that certain components are crucial to enabling learning:

concrete experience – actually doing an activity, for example, searching a database, finding your way around a library or remembering a specific occasion when you did it

reflection – on **how** the activity was carried out. The right answer or result is not the point here. Learners need to recapture the **process** of searching/finding/evaluating to reflect on the steps they took to get the answer or result. Only then will it be possible to explore alternatives or more effective and efficient strategies that they might use. Peer discussion of processes can be very powerful. However, it can be difficult to recall what we actually did: therefore the role of the librarian should be to facilitate this process. Librarian observation, simple search strategy sheets recorded by the learners during the search, or peer observation can be used to capture the approaches used.

abstract conceptualisation – the 'what does this mean to me?' stage. It is important for the learners to make sense of their reflections, for instance by asking 'What will I do differently in future?' 'Which bits of my strategy are OK, what should I fine tune?'

active experimentation – try it out or, if time is limited, plan how to take what has been learnt further next time.

Effective learning is best supported by linking together doing, reflecting and conceptualising. These elements appear time and time again in the writings of major theorists in adult learning. The librarians starting on my teaching courses may have come across the experiential learning cycle but they have not tended to see it as crucial to supporting learning. They have often not understood the importance of introducing an activity early in a session to enable learners to build on existing strategies: reflection on process is also often lacking.

The Experiential Learning Cycle offers an example of the practical nature of good theory. The Cycle provides a solid foundation on which to design learning activities, whilst allowing room for the teacher to choose the precise techniques. It shows how to put the learner at the centre of the session.

An example of how the use of learning theory can make a real difference occurred when I was asked to help re-design some workshops for doctors. The health librarians had been running sessions on searching within an evidence-based medicine framework. They had tried different techniques, had planned carefully, had identified their objectives and were enthusiastic about the topic. However it was not working as well as they had hoped. We discussed scaffolding and experiential learning. They decided to turn the session round and begin with the doctors, in small groups, carrying out an electronic search to answer a question that they formulated themselves. The computers were set up to record the search process. After some time the groups got together to look at their answers and their search strategies (captured electronically). A fascinating debate ensued comparing different approaches, the time taken and the quality of the results. The librarians contributed their expert knowledge at this point, not earlier. Without a grasp of learning theory, this approach would probably not have been tried. Even if the approach had been considered I suspect that it would have felt 'risky' without a good theoretical base to justify it.

Problem solving

There has been talk about deep and surface learning for a number of years. (Entwistle: 1992). Questions have been asked, particularly in higher education, about what we are trying to achieve: what type of learning we seek to promote. The librarians that I have worked with over the past fifteen years have tended to agree that their students need to be able to display a range of strategies in order to use resources effectively. Rote memorising of set procedures and routines, the regurgitation of facts and the passive acceptance of information (surface learning) will not take learners very far in the modern information environment. Librarians want to enable students to critically interact with information, to understand the key stages of the research process and to formulate those search strategies best suited to the task in hand (deep learning).

Penny Moore, in research undertaken with primary school pupils (Moore: 1994) found that many research lessons and research tasks demanded *"a fairly superficial interaction with information"* and that newer approaches to teaching information skills *"do not address the complexities of information retrieval and use as experienced by many people"*. (Moore, ibid). Students had learned a sequence for finding information (surface learning) but "if any part of the sequence failed they often seemed surprised and confused". She concludes that *"if we are to improve their abilities in finding and using information, we should make explicit the problem-nature of the task"*.

A problem-solving approach lies at the heart of deep learning, whose other key elements include relating ideas to previous knowledge and experience, and critical interaction with information. Unfortunately, many librarian-led courses or sessions seem to be constructed to promote surface learning, although

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librarians say that they are trying to encourage problem-solving strategies. This is partly because they use a transmission model to teach these strategies rather than 'activity, refection, feedback'. If we want learners to develop the ability to act flexibly and effectively when they interact with resources (deep learning), a problem solving rather than subject-based approach should be adopted. (In this case 'subject' refers to topics such as evaluating websites, surfing the Internet, or doing a literature search). Daines (1992) observed that *"Adults learn from problems rather than from subjects"*. Such a simple insight can have far reaching impact on teaching. It does not dictate which problem-solving techniques to use (case-studies, simulations, evaluation of data) but does lead the teacher to base lessons round information problems.

Learning Preferences

An increasing focus on the learner and learning, rather than on teaching, can usefully lead to some consideration of how learners differ in their approaches to learning. This is a subject that has been growing in interest for some time. The work on multiple intelligences (Gardner: 1983); research into learning styles (Kolb: 1976; Honey and Mumford: 1992); and work on cognitive styles (Riding and Rayner: 1998) together present any teacher with a range of ideas about how style preferences affect learning. This research was not designed to label learners; rather, it provides a useful tool for reflection on one's own teaching practice. The way in which an individual teaches can be heavily influenced by how they prefer to learn. If someone has a strong preference for a well structured, logical instruction in their own learning, they will tend to plan their teaching to reflect this approach. They are unlikely to teach using open-ended, unstructured activities. However this might present problems to some learners. Many of the librarians who attend my teaching courses find the exploration of learning styles the most illuminating element of the course – and more directly practical in developing their teaching than sessions looking at teaching techniques. The exploration enables librarians to see hitherto unrecognised patterns in their lessons and to understand why some students seem unable to connect with the activities or presentations that they have planned. The research also provides a framework within which to think about how to extend the range of teaching strategies: in order to introduce more variety into teaching, some librarians I have worked with have used learning styles theory to help them develop back-up materials to be used in the event of a lesson not working out as planned.

The elements of learning theory that I have briefly introduced in this paper only scratch the surface of what has been written about learning. When I have time, for example on the MA (Education) course that I ran for librarians, I explore many other aspects of learning before beginning to consider how to teach. But even on a one-day course on teaching, I spend **at least** half the time looking at learning. The more I work with professionals who do some teaching, the more I become convinced that this is not an optional extra. The aspects of learning outlined so far are those I concentrate on when I have limited time with any group. I am told that these insights make a significant difference to how the group members view teaching and how they go about it.

Developing librarians as teachers: some in-service approaches

All the in-service provision that I am involved with has a strong learning focus, whether it lasts for one day or is part-time over three years. My intention throughout is to provide librarians with a strong enough theoretical base to enable them to take *"Reasoned action"* (Carr: 1995), that is, the ability to determine what ***ought*** to be done in a teaching situation and to justify it if necessary, rather than ***how*** to do something. I want librarians to go away from my in-service having the ability to be appropriately flexible. This means that, as well as exploring elements of learning theory, there is an emphasis on refection on teaching and on researching into one's own teaching. Lawrence Stenhouse (1975) believed that research strengthens teacher's judgement and enables self-directed improvement of practice: *"It is difficult to see how teaching can be improved ... without self-monitoring and research on the part of teachers."*

Here is an outline of some of the types of in-service provision that I facilitate:

Short courses (two to three days)

Most of the first day is spent exploring the learning theories outlined in this paper and using new understandings to illuminate current practice. After brief discussion of session planning and different teaching strategies the librarians pair up to plan a thirty minute teaching session on a topic of their choice, which is run on day two. A gap of at least two weeks is left between the days. Each pair teaches their session to the other course participants. They get feedback from their 'learners' and from the trainer. The feedback is practical, but refers to learning theory to explain the issues that emerge. The rest of the course is spent looking at how learning occurs in groups. On the three day courses we move into assessment and evaluation.

e-Learning

For the past two years there has been a national training programme to support school librarians as they develop the use of ICT within their libraries. The Library Association ICT Training Consortium (the name has not changed!) which I helped to create, took a strong developmental approach to the training. One of the on-line training programmes that I wrote looks at teaching information skills. This begins with an activity to encourage librarians to examine how they learn and then to observe some of their pupils learning. Observation and reflection are strong themes throughout the module. Work with pupils and teachers is expected, as is discussion with other librarians via a chatroom. The module attempts to embody good learning principles and thus to encourage librarians to use these principles in their own practice. Librarians are expected to move on from their current position, not just to carry out tasks irrespective of their current practice.

Education Librarians' Action Research Group

A number of librarians, who had successfully completed the MA Education course which I designed, wanted to continue developing their practice. They decided to form an action research group that would meet regularly and asked me to facilitate this. We decided on the action research format because it involves the practitioner in a systematic process of investigation and development within their work context. Learners and teaching colleagues have to be involved as the librarian seeks to understand what is happening and to find ways of improving the quality of their actions. Learning theory provides ideas for alternative strategies. Members of the group report on their research, receiving help and suggestions from each other. Individuals have developed a range of new practices, for example, new ways of collaborating with colleagues, new approaches to facilitating homework clubs and active involvement in delivering the new national literacy strategy.

These in-service opportunities have real impact as librarians become more open to their learners. The use of action research, observation and reflection presuppose a real curiosity about how learners see things, about learner priorities and about how people learn. Most libraries (public, health, education and special) are now in the business of supporting learning at some level. How will this be effective if librarians do not have a good understanding of learning? It is interesting to note that Library Schools in England do not appear to teach any learning theory. As librarians are increasingly called on to do more teaching or facilitation of learning, this is a sad oversight!

REFERENCES

AUSUBEL, D. (1968) *Educational psychology: a cognitive view* New York, USA: Holt, Rinehart

CARR, W. (1995) *For education: towards critical educational enquiry* Buckingham: OUP

CURZON, L.B. (1990) *Teaching in further education* London: Cassell

DAINES, J. et al. (1992) *Adult learning, adult teaching* University of Nottingham

ENTWISTLE, N. (1992) *The impact of teaching on learning outcomes in higher education* Sheffield: CVCP

ENTWISTLE, N. and HOUNSELL, D. (1975) *How students learn: readings in higher education* University of Lancaster

GARDNER, H. (1983) *Frames of the mind: theory of multiple intelligences* London: Basic Books

HAMMERSLEY, M. (1991) 'An open letter' *Education Action Research (3)* 1

HONEY, P. and MUMFORD, A. (1992) *The manual of learning styles* Peter Honey

JARVIS, P. (1995) *Adult and continuing education: theory and practice* London: Routledge

KOLB, D.A. (1984) *Experiential learning: experience as a source of learning and development* London: Prentice Hall

MOORE, P. (1994) 'Information problem-solving: a wider view of library skills' *J. of Contemporary Educational Psychology (10)* 4.

PALMER, P.J. (1998) *The courage to teach: exploring the inner landscape of a teacher's life* San Francisco, USA Jossey-Bass

RIDING, R. and RAYNER, S. (1998) *Cognitive styles and learning strategies* London: David Fulton

SOTTO, E. (1994) *When teaching becomes learning* London: Cassell

STENHOUSE, L. (1975) *Introduction to curriculum research and development* London: Heineman

STREATFIELD, D.R. and MARKLESS, S. (1995) *Invisible learning: the contribution of school libraries to teaching and learning* London: The British Library

TIGHT, M. (1996) *Key concepts in adult education and training* London: Routledge

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